Application No.: 10/568,647

Attorney Docket No.: 18244-6115

**REMARKS** 

This is a full and timely response to the outstanding non-final Office Action mailed

August 1, 2008. In the Office Action, claims 1-5 and 7 were preliminarily rejected as allegedly

being unpatentable under 35 USC §103(a). In addition, claim 6 was rejected under 35 USC

§112, second paragraph, as allegedly failing to adequately point out the subject matter of the

claimed invention, and under 35 USC §101. Further, headings for portions of the application

were requested.

In the present response, claims 1, 2, and 6 have been amended. In addition, claims 1-7

remain pending in the present application.

RESPONSE TO HEADINGS REQUEST

In the Office Action, headings were requested to identify different portions of the

application. In response, the Applicant has added headings to the pending application.

RESPONSE TO CLAIM REJECTION UNDER 35 USC §112 and 35 USC §101

In the Office Action, claim 6 was preliminarily rejected under 35 USC §112, second

paragraph, and 35 USC §101. In response, the Applicant has amended claim 6.

-6-

Application No.: 10/568,647 Attorney Docket No.: 18244-6115

## RESPONSE TO CLAIM REJECTIONS BASED ON OBVIOUSNESS

In the Office Action, claims 1-5 and 7 have been preliminarily rejected under 35 USC§103(a) as allegedly being unpatentable over US Patent 6,757,404 to Takewa et al. (hereafter, "Takewa"), in view of Mitsuhiro Japanese Patent Publication 02-043895 (hereafter, "Mitsuhiro"). It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly or explicitly, all elements/features/steps of the claim at issue. See, e.g., In re Dow Chemical, 5 U.S.P.Q. 2d 1529, 1531 (Fed. Cir. 1988), and In re Keller, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981).

## Claim 1

Amended independent claim 1 reads:

1. A loudspeaker provided with a chassis, a movable body, a resilient suspension for guiding the movable body with respect to the chassis along a translation axis, and an electric actuator comprising a stationary part and a translatable part for driving the movable body along the translation axis, which movable body has a diaphragm structure comprising a central dome-shaped diaphragm and a cone-shaped diaphragm concentrically arranged with respect to the dome-shaped diaphragm, which cone-shaped diaphragm has a back portion and a front portion which is wider than the back portion, wherein a rim of the dome-shaped diaphragm is attached to a back edge of the back portion of the cone-shaped diaphragm, the cone-shaped diaphragm enveloping the dome-shaped diaphragm, the resilient suspension comprises a resilient element connecting the diaphragm structure to the chassis near the back portion of the cone-shaped diaphragm, and a further resilient element connecting the diaphragm structure to the chassis near the front portion of the cone-shaped diaphragm, and wherein the translatable part of the actuator extends into a space enveloped by the domeshaped diaphragm.

## (Emphasis Added)

Application No.: 10/568,647

Attorney Docket No.: 18244-6115

Independent claim 1 has been amended to add the limitation of the electric actuator comprising a stationary part and a translatable part, wherein the translatable part of the actuator extends into a space enveloped by the dome-shaped diaphragm. The Applicant respectfully submits that by accommodating the translatable part of the electric actuator into the space enveloped by the dome-shaped diaphragm, it is possible to effect a reduction in the height of the loudspeaker without degrading loudspeaker sound performance.

The Applicant respectfully submits that neither Takewa, nor Mitsuhiro, disclose, teach, or suggest the arrangement of the electric actuator comprising a stationary part and a translatable part, wherein the translatable part of the actuator extends into a space enveloped by the domeshaped diaphragm. Instead, for example, throughout Takewa, what is identified as the translatable part (identified as the voice coil bobbin 6 and the voice coil 7) is secured to the diaphragm 90 at a voice coil junction part 94, which includes an annular depending rib 93 for FIG. 13. This is at the rim of the dome-shaped diaphragm.

For at least the abovementioned reasons, allowance of amended independent claim 1 is respectfully requested.

## **Claim 2-5 and 7**

Since amended independent claim 1 is allowable over the prior art of record, its dependent claims 2-5 and 7 are allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Additionally and notwithstanding the foregoing, these dependent claims recite further features and/or combinations of features (as is apparent by examination of the claims themselves) that are

Application No.: 10/568,647

Attorney Docket No.: 18244-6115

patentably distinct from the prior art of record. Hence, there are other reasons why these dependent

claims are allowable.

Claim 6

Amended independent claim 6 at least contains the element of amended claim 1,

mentioned as not disclosed, taught, or suggested by Takewa in view of Mitsuhiro, and allowance

of claim 6 is respectfully requested.

**CONCLUSION** 

In light of the foregoing and for at least the reasons set forth above, the Applicant

respectfully requests favorable reconsideration and allowance of the present application and the

presently pending claims. If in the opinion of the Examiner, a telephonic conference would

expedite the examination of this matter, the Examiner is invited to call the undersigned attorney

at (603) 627-8134.

Respectfully submitted,

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-9-